

CE Data sheet

Rhepanol® hg



Product name:	Rhepanol® hg
General building inspectorate test certificates:	P-K 021/03.11; P-K 022/03.11
Manufacturer/supplier:	FDT Flachdach Technologie GmbH Eisenbahnstraße 6-8 68199 Mannheim Germany
Production plant:	Mannheim
Type of application:	As sealing of green, gravelled or used roofs. The waterproofing membrane are also used in the area of building waterproofing. For the installation, the application guidelines of the manufacturer have to be observed.
FPC certificate no.:	1343-CPD-K06-0660.10 1343-CPD-K06-0660.11 1343-CPD-K06-0660.12 1343-CPD-K06-0660.18
FPC issue of certification:	06
European standard:	EN 13956/EN 13967
Product description:	Synthetic roofing membrane made of PIB with glass fleece reinforcement and compatible with bitumen. Effective thickness is 1.5/1.8 mm.
Standard membrane dimensions:	15 m x 2.05 m x 1.5 mm 15 m x 2.05 m x 1.8 mm

Rhepanol® hg 1.5 mm (1.8 mm)

Essential characteristics	Performance	Test Standard
Water tightness	≥ 400 kPa/72 h	DIN EN 1928 (B)
Resistance to root penetration	root- and rhizome-resistant	FLL DIN EN 13948
Reaction to fire	Class E	DIN EN 13501-1
Joint peel resistance	≥ 150 N/50 mm	DIN EN 12316-2
Joint shear resistance	≥ 200 N/50 mm (tear off outside the joint seam)	DIN EN 12317-2
Tensile strength	≥ 4 N/mm ²	DIN EN 12311-2 (B)
Elongation	≥ 400 %	DIN EN 12311-2 (B)
Resistance to impact rigid substrate flexible substrate	≥ 700 mm ≥ 2,000 mm	DIN EN 12691 (A/B)
Tear resistance	≥ 90 N	DIN EN 12310-2
Dimensional stability	≤ 0.5 %	DIN EN 1107-2
Foldability at low temperature	≤ -60 °C	DIN EN 495-5
UV exposure	Class 0 (5,000 h)	DIN EN 1297
Hail resistance rigid substrate flexible substrate	≥ 20 m/s ≥ 30 m/s	DIN EN 13583
Water vapour property μ	≥ 160,000 ± 30 %	DIN EN 1931 (B)
Nail shank tear resistance	≥ 150 N	DIN EN 12310-1
Durability of water tightness against ageing	passed	DIN EN 1296 (96 d) DIN EN 1928 (B) (24 h/60 kPa)
Durability of water tightness against chemicals	passed	DIN EN 1847 (28 d/+23 °C) DIN EN 1928 (B) (24 h/60 kPa)
Resistance to static load	≥ 20 kg	DIN EN 12730 (A/B)
Chemical resistance	passed (List annex C from DIN EN 13956)	DIN EN 1847
Behavior when exposed to bitumen	passed	DIN EN 1548
External fire performance	no requirement	DIN CEN/TS 1187
Dangerous substances	see footnote ¹⁾	–

¹⁾ European harmonised standards for testing methods do not exist, therefore the testing and declaration for the release of substances must be obtained in regards of national regulations/requirements

Product information

Rhepanol hg – sealing in loose-laid layer build-up with ballast and roof garden system

Rhepanol hg is a roofing membrane made of polyisobutylene (PIB) according to DIN EN 13956, and a waterproofing membrane made of polyisobutylene (PIB) according to DIN EN 13967. The only difference is that Rhepanol hg reinforcement is not achieved by a fleece backing, but by a central glass fleece reinforcement. Furthermore, Rhepanol hg is optimised for hot-air application. So for joining the seams only hot-air welding is used. Because of their excellent material properties, Rhepanol hg roofing membranes can be laid in a single layer.

Material characteristics

- Long-term proven material polyisobutylene (PIB). A roofing membrane according to the general building authority test certificate AbP-No. P-K 021/03.11 and P-K 022/03.11 MPA Darmstadt, Germany
- Root- and rhizome-resistant according to the FLL method without the use of herbicides
- Compatible with bitumen
- Highly resistant to perforation
- Resistant against red algae
- Free from plasticisers and halogen fire retardants
- Reaction to fire: Building material class B 2, DIN 4102 or class E according to DIN EN 13501-1
- Permanently resistant to UV radiation
- Hail-resistant according to DIN EN 13583
- Compatible with all kinds of insulation materials
- Flexible at temperatures as low as –60 °C
- Hot-air weldable
- Dimensionally stable due to the glass fleece reinforcement
- Application without open flame
- Can be connected to Rhepanol fk using hot-air welding
- Suitable for rainwater retention (retention roof)
- Also suitable for non-sloping surfaces

Quality assurance

Rhepanol hg is subject to constant quality control through internal and external monitoring. The internal quality assurance system of the entire company is certified according to DIN EN ISO 9001, the world's most stringent quality standard, and is regularly checked by TÜV SÜD Management Service GmbH.

Range of application

Rhepanol hg is used as a roof sealing in a loosely-laid layer build-up under greened, gravelled or used areas and in the area of building waterproofing.

Ecology and environment

- Certified in a life cycle assessment according to DIN EN ISO 14040 ff
- Certified with an Environmental Product Declaration (EPD) according to ISO 14025 and EN 15804 (www.ibu-epd.com)
- Listed in the DGNB Navigator (www.dgnb-navigator.de)
- Rhepanol is not a dangerous good according to the EU Ordinance on Hazardous Substances.

Storage conditions

- The roofing membranes retain their product properties in unopened and undamaged original packaging
- Store material in original packaging until processing
- Carefully reseal opened packaging units when storing outdoors
- Store rolls horizontally only
- Protect rolls from direct sunlight, rain and snow

FDT legal notice

We refer emphatically to the fact, that all details mentioned, especially the application and utilisation recommendation for the products and their system accessories, have been developed under normal conditions, and based on our knowledge and experience. Appropriate storage and usage of the products are assumed. A warranty or reliability of a finished project cannot be deduced because of varying materials, substrates and differing work conditions, neither by any indications nor from verbal statements, irrespective of any legal positions. For the possible accusation that FDT acted intentionally or grossly negligent, the user has to supply evidence that they provided FDT with all information and details necessary for an appropriate and correct evaluation through FDT in written form, immediately available and complete. The user is responsible for ensuring that the products are suitable for the given application. It is FDT's right to change product specifications without notice. Property rights of third parties are to be considered. In addition our particular sales and delivery terms are valid. The latest version of our product data sheet is obligatory, which can be requested directly through FDT.

All information as well as all technical and drawing data comply with current technical standards and are based on our experience. National standards and regulations must be observed.

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